

# River Mile 10.9 Removal Action Update

CAG Meeting  
Lyndhurst, NJ  
January 17, 2013

## Overview

"The work will be conducted to minimize impacts and inconvenience to the community

!! This project will not cause flooding

"All work will be conducted on the River

!! No contaminated sediment or capping materials will be staged in the park or moved through Lyndhurst

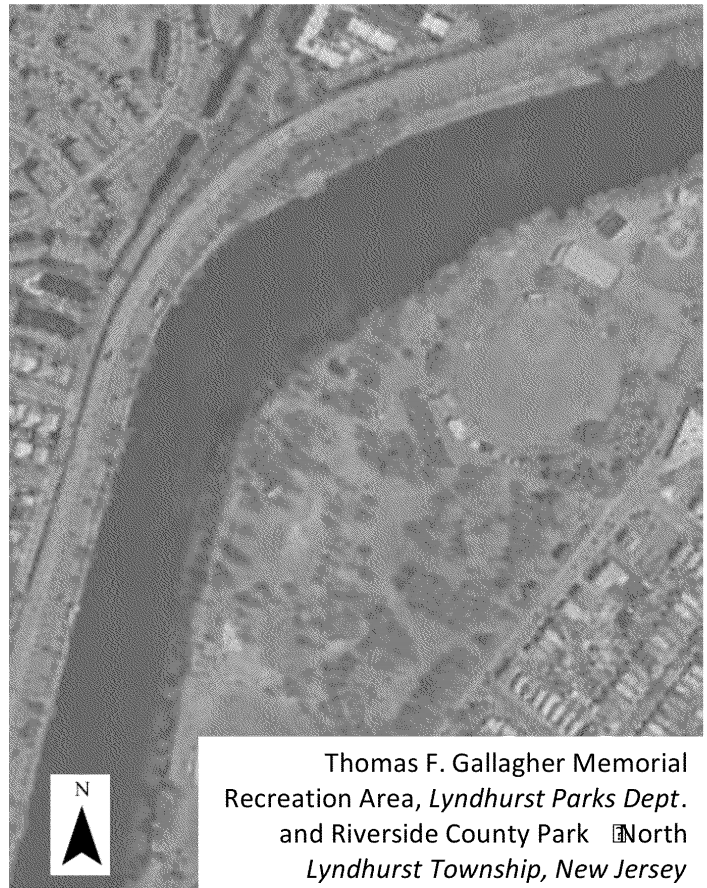
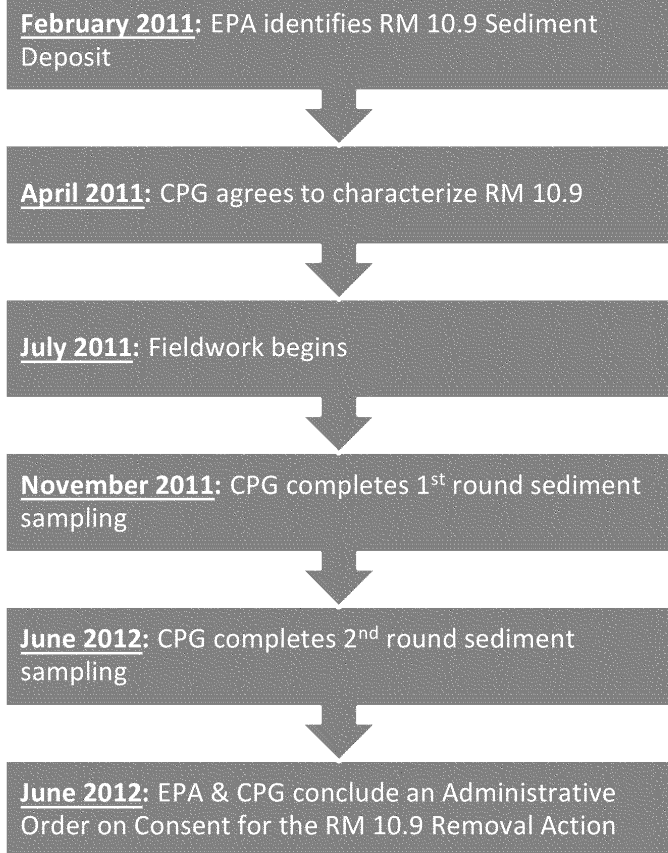
"CPG will work with local, state and federal officials to ensure community health and safety and inform the community

# Purpose of this Presentation



- Provide project background
- Discuss the design process
- Review major removal action elements
- Address your questions and concerns

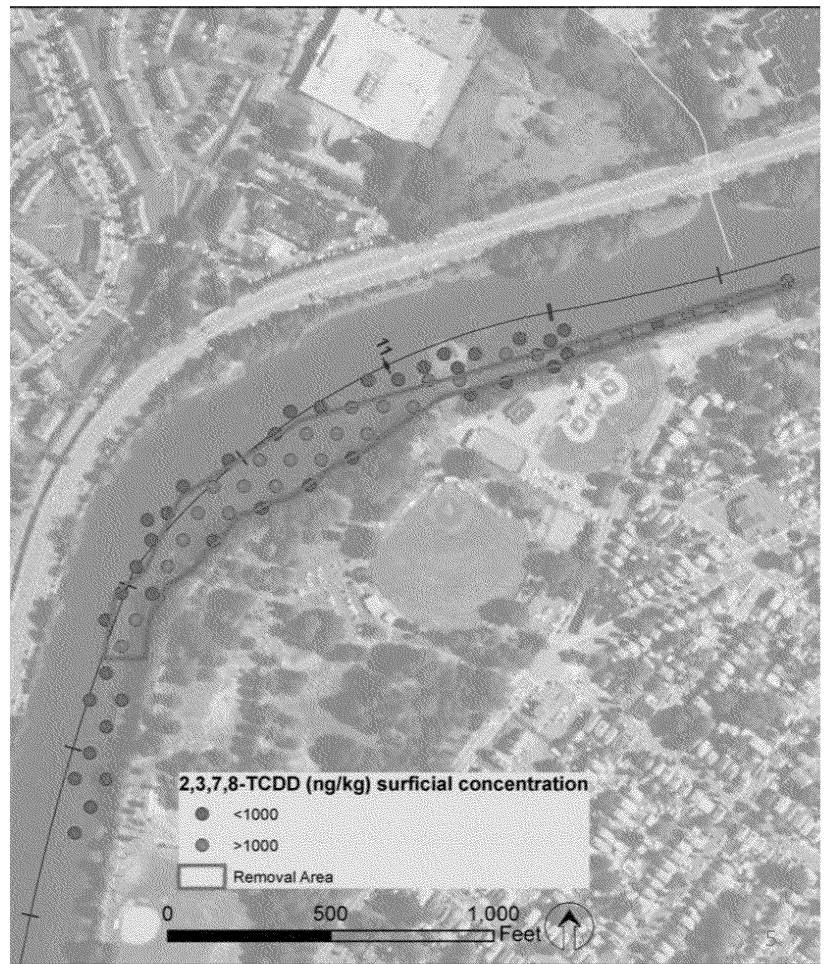
# River Mile 10.9 Background



## RM 10.9 Characterization

Well-defined structure & patterns in the RM 10.9 data:

- Using the dioxin, 2,3,7,8-TCDD - defined high concentrations of COPCs
- Other COPCs such as PCBs and Mercury are co-located with TCDD
- Sediment deposited in the 1950s & 60s
- Identified ~20,000 cy of sediments in a 5.5 acre for removal and capping



# Design Process

## " Design Process/Schedule

- !!Work Plan submitted in August 2012 and approved October 2012
- !!Basis of Design (30%) completed in August 2012
- !!Pre-Final Design (90%) submitted Nov 2012; EPA & DEP comments received January 2013
- !!Final Design submittal due February 2012

## "EPA & NJDEP Oversight

- !!Bi-weekly status meetings/calls with EPA
- !!Regular coordination with NJDEP on required permit equivalents

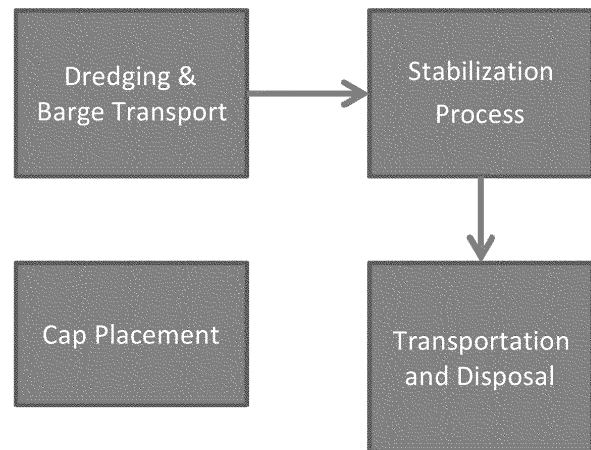
# Design Considerations

- "All work and material transport will occur on the water
  - !!No dredged sediments or capping materials will be staged in the park/recreation area or transported on local streets
- "Minimal Impact to the community
  - !!Some impact on recreational boating
  - !!Will work around major local events (holidays & Regatta)
  - !!County Park and Twp Recreation Area will remain open
  - !!Odor & Air Quality Monitoring
  - !!Community Health & Safety Plan will be implemented
- "Work will occur dawn to dusk (~12 hours/day)
  - !!Dredging/Capping    ?6 days/week
  - !!Maintenance    ?1 day/week
  - !!Minimizes already minimal noise and lighting impacts

# Major Removal Action Elements

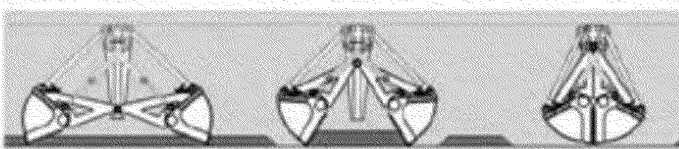
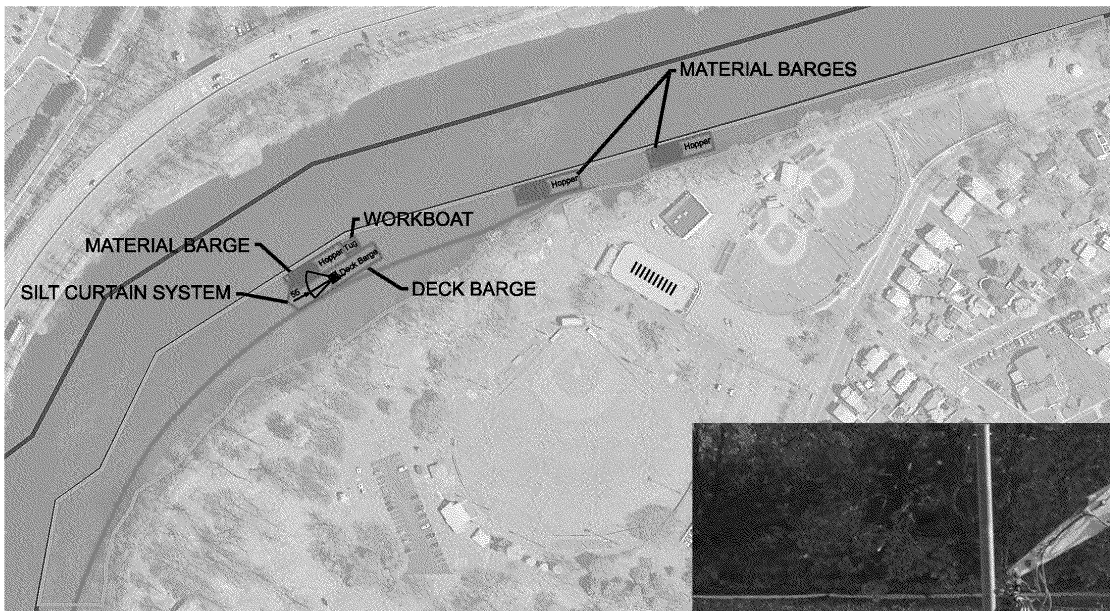
Four major elements:

- !!Dredging and Barge transportation of sediment
- !!Stabilization of sediment
- !!Transportation and disposal to out-of-state landfill
- !!Capping for underlying sediment





# Dredging Operations



# Re-suspension Management

"Sediment re-suspension into the water will be minimal based on:

- !!Relatively low water velocities during typical flows

- !!Shallow water depths: 2.5 ~~2~~ 4 feet over removal area

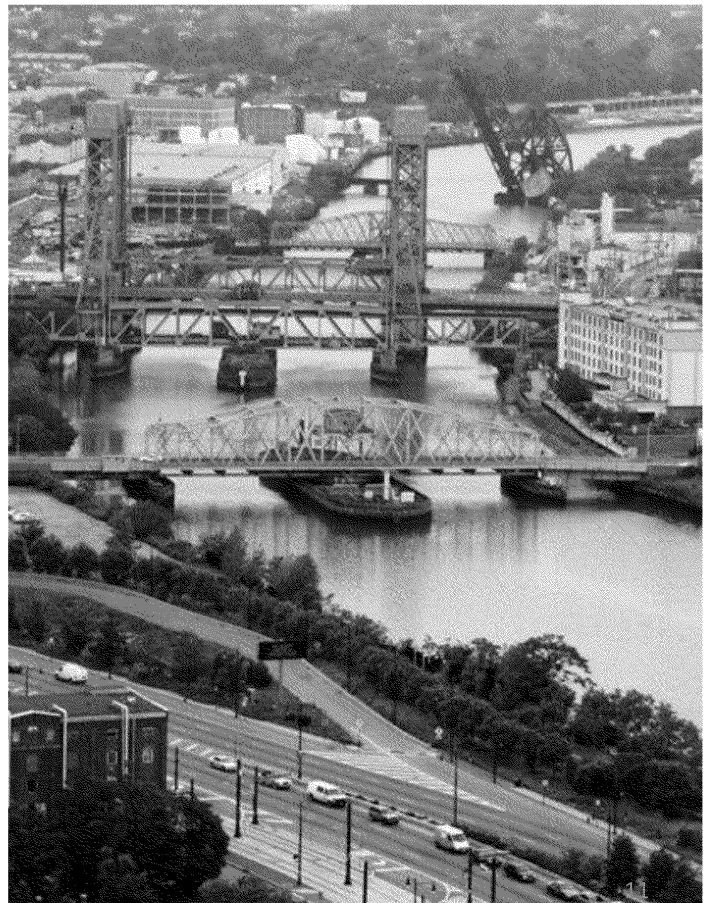
"Will also utilize Best Management Practices

- !!Continuous turbidity monitoring to determine if changes in dredging rate are appropriate

- !!Silt curtain installation for dredge plant is also proposed in 90% design to provide additional controls

# Barge Transport

- " Goal - Transport dredged sediment and cap materials without daily bridge openings
- " 17 bridges between Removal Area and Newark Bay
- " 3 ~~4~~ barges/day expected
  - !! 250 yd<sup>3</sup>, shallow draft
  - !! 48 ft. horizontal and 10 ft. vertical clearance at low tide
  - !! Transport during low tide
  - !! 24 hour operation likely
- " Transporting ~500 cy/day of sediment



# Stabilization

Two local facilities under consideration

!! Clean Earth

!! Cashman

" Previously approved to process dredge sediment from New Jersey harbor maintenance projects

" NJDEP requiring that facilities segregate LPRSA sediment from other sediment as well as clean equipment after processing RM 10.9 sediment



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# Stabilization Process

" Remove free water that separates during barge transport and store it for disposal at a commercial industrial wastewater facility

!! Anticipate disposing 40,000 gallons/day

" Mix sediment with Portland Cement to eliminate additional free water and to make sediment transportable ?



# Sediment Transportation & Disposal

"Sediment will be transported and disposed at an out-of-state Sub-title C landfill

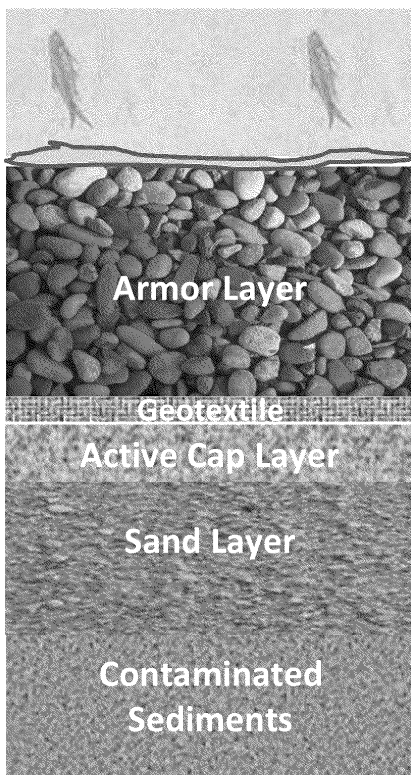
"Testing indicates stabilized sediment is a non-hazardous waste

"Transport and Disposal contractors are currently developing and proposing transportation options

!!Truck vs. Truck and Rail



# Cap Placement



"Remaining sediment will be covered with nearly 2 feet of clean materials

" An active layer to control chemical movement

"An armor layer to prevent cap erosion

# Removal Action Monitoring

## "Air Quality

- !!Odors are not expected

- "Hydrogen Sulfide was not detected in 99% of the sediment samples previously collected from the Removal Area

- !!Perimeter air monitors will be placed for duration of dredging operations as a precaution

## "Water Quality

- !!Re-suspension expected to be minimal

- !!Continuous turbidity monitoring will be implemented as a control measure



# Removal Action Schedule

Mar 7 Apr: Finalize Construction Plans

May: Install water quality and air monitors

June: Mobilize equipment (dredge plant)

July 7 Aug: Dredging Operations

Sept 7 Oct: Capping Operations

# Post-Removal Activities

- "Removal Action Report

- "Long-term monitoring

- !Physical monitoring for stability after various river flows
  - !Bathymetry and coring
- !Chemical monitoring to confirm active layer effectiveness

# Community Interface with Project Team

- " Single Point of Contact via EPA & NJDEP

- " Stakeholder Input

  - !! Sought throughout

  - !! Evaluated by EPA

  - !! Forwarded to CPG Design Team for consideration

  - !! Incorporated into design when relevant to Removal Action

- " Community Health & Safety Plan

  - !! Odor and Air Quality Monitoring

  - !! Physical Security

- " Managing Navigation Concerns

  - !! Warning lights/shapes and Coast Guard notifications

  - !! Communication with boat clubs

- " Staging will occur at down river industrial sites

  - !! Design decision made to minimize impact on community activities

## Summary

"Because of the scope this project, the CPG has been able to:

- "utilize smaller equipment and

- "schedule our activities

"Minimizing disruption to local residents

## Questions?